

In re Patent Application of:
CLAYTON ET AL.
Serial No. 09/790,957
Filed: February 9, 2001

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification:

The paragraph beginning at page 2, line 32 has been amended as follows:

-- The present invention additionally provides a diode support and rupture containment device which easily mounts adjacent a diode so that access to the diode for inspection, cleaning, or other associated maintenance can be achieved, which has insulating qualities and strength to resist high temperature material being ejected or sprayed during diode rupture, and which prevents damage to other portions of a power generation system in the event a diode ruptures or is otherwise damaged. The diode support and rupture containment device is also advantageously relatively inexpensive, easily retrofitable within a power generation system, and provides support for the ceramic or insulative case of a high voltage diode. The present invention further provides methods of containing diode material, e.g., ejected molten material, in[.] the event a diode ruptures or is otherwise damaged. --

The paragraph beginning at page 3, line 11 has been amended as follows:

-- More particularly, a power generator system is provided having a power generator and an exciter for excitation of the power generator. The exciter preferably includes a diode wheel. The diode wheel has rotating support structure, a plurality of diodes mounted to the structure, and a plurality of [a] diode support and rupture containment devices each positioned adjacent a respective one of the

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plurality of diodes to support the diode and contain the diode within the confines thereof in the event the diode ruptures.

Each of the diode support and rupture containment devices preferably includes a pair of spaced-apart containment members having the diode positioned therebetween. --

The paragraph beginning at 5, line 5, has been amended as follows:

-- The present invention will now be described more fully hereinafter with reference to the accompanying drawings, in which preferred embodiments of the invention are shown. This invention may, however, be embodied in many different forms and should not be construed as limited to the illustrated embodiments set forth herein. Rather, these illustrated embodiments are provided so that this disclosure will be thorough and complete, and will fully convey the scope of the invention to those skilled in the art. Like numbers refer to like elements throughout[, and prime and double prime notation if used indicate similar elements in alternative embodiments].--

The paragraph beginning at page 6, line 11, has been amended as follows:

-- As illustrated in FIGS. 2-3, each of the diode support and rupture containment devices 40 preferably includes a pair of spaced-apart containment members 42, 47 having the diode 35 positioned therebetween. Each of the containment members 42, 47 is preferably formed of an insulating material and has a substantially annular shape to thereby define an insulative disc. Each of the containment members 42, 47

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preferably are positioned to cover or encase only the end portions of the diode 35 where rupture containment and support are more needed as understood by those skilled in the art (see FIG. 5). The insulating material of each containment member 42, 47 is preferably strong enough to resist the temperature of the molten material ejected from a diode 35 such as when material contacts a metal-electric junction 45 where the diode 35 is connected, e.g., to or through a heat sink 32 to a lead member 33 and/or the rotating support structure 31 of the diode wheel 30. The heat sinks 32 and diodes 35 are preferably mounted in the module with heat sink support straps 37, bolts or other fasteners 38, stand-off insulators 39 and spacers 29 as understood by those skilled in the art. This containment, for example, advantageously prevents phase-to-phase arcing between diode mount assemblies.--

The abstract of the disclosure at page 12 has been amended as follows:

-- A power generator system (10) is provided having a power generator (15) and an exciter (20) for excitation of the power generator (15). The exciter (20) preferably includes a diode wheel (30). The diode wheel (30) has an a rotating support structure (31), a plurality of diodes (35) mounted to the rotating support structure (31), and a plurality of a diode support and rupture containment devices (40) each positioned adjacent a respective one of the plurality of diodes (35) to support the diode (35) and contain the diode (35) within the confines thereof in the event the diode ruptures. Each of the diode support and rupture containment devices (40) [preferably] includes a pair of

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insulative spaced-apart containment members (42, 47) having the diode (35) positioned therebetween. [Each of the containment members (42, 47) is preferably formed of an insulating material and has a substantially annular shape to thereby define an insulative disc. A method of containing material ejected from a diode (35) of a power generation system (10) is also provided. The method preferably includes pivotally connecting a rupture containment device (40) to a diode mounting region and adjacent a diode (35) of the power generation system (10). The rupture containment device (40) includes at least one rupture containment member (42, 47) formed of an insulating material.] --

In the Claims:

Claims 2, 6, and 9 have been cancelled.

Claims 1, 5, and 8 have been amended as follows:

1. (Amended) A power generator system comprising:
a power generator; and
an exciter for excitation of said power generator,
the exciter including a diode wheel, the diode wheel having a rotating support structure, a plurality of diodes mounted to the structure, and a plurality of a diode support and rupture containment devices each positioned adjacent a respective one of the plurality of diodes to support the diode and contain the diode within the confines thereof in the event the diode ruptures, each diode support and rupture containment device including a pair of spaced-apart insulative containment members with the respective diode positioned therebetween.

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5. (Amended) An exciter for a power generation system, the exciter comprising:
a rotating support structure;
a diode mounted to the structure; and
a diode support and rupture containment device positioned to support the diode and contain the diode within the confines thereof in the event the diode ruptures, the diode support and rupture containment device including a pair of spaced-apart insulative containment members arranged to have a diode positioned therebetween, the diode including an insulative casing, each of the pair of insulative containment members positioned to extend from a metal-electric connection region when the diode is connected to a conducting member to the insulative casing of the diode.

8. (Amended) A diode support and rupture containment device for a diode of a power generation system, the device comprising:

a pair of spaced-apart insulative containment members arranged to have a diode positioned therebetween, the diode including an insulative casing, each of the pair of containment members positioned to extend from a metal-electric connection region when the diode is connected to a conducting member to the insulative casing of the diode.

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: DIRECTOR, U.S. PATENT AND TRADEMARK OFFICE, WASHINGTON, D.C. 20231, on this 6th day of August, 2002.

